

Department of Resources Recycling and Recovery

SCOPE OF WORK

SB 1383 Infrastructure and Market Analysis

1. Introduction/Objectives

The SB 1383 Infrastructure and Market Analysis contract is designed primarily to conduct research and analysis of the organics recycling and diversion infrastructure, barriers to infrastructure development, and the status of markets for products generated by organics recycling. Section 42653 of Senate Bill (SB) 1383 (Lara, Chapter 395, Statutes of 2016) requires CalRecycle, in consultation with the California Air Resources Board, to analyze the progress that the waste sector, state government, and local governments have made in reducing organic waste disposal by 50% by 2020 and 75% by 2025. CalRecycle will provide all draft work products associated with this contract to the California Air Resources Board for review as part of the consultation process required by SB 1383. Specifically, this contract will address the following elements of the analysis required by SB 1383:

- The status of new organics recycling infrastructure development
- The progress in reducing regulatory barriers to the siting and permitting of organics recycling facilities
- The status of markets for the products generated by organics recycling facilities

The high level of expertise required from various disciplines necessitates that the Contractor assemble a team of highly experienced and respected consultants to effectively provide the necessary assistance. Members of the Contractor's team must be highly knowledgeable regarding California's organics recycling and processing infrastructure, end-use markets for products generated by organics recycling, and state and local regulations related to organics recycling.

2. Work to be Performed

The Contractor is responsible for collecting, compiling, analyzing, and reporting data and information related to California's organics recycling and diversion infrastructure, barriers to the development of that infrastructure, and the status of markets for products generated by recycling and diverting organic materials from landfills. The following is a general overview of the work that the Contractor shall perform.

A. The Contractor agrees to:

1. Develop Work Plan
2. Collect, compile, analyze, and report data and information regarding the status of the organics processing and recycling infrastructure in California.
3. Conduct research on the status of end-use markets for products generated by organics recycling and diversion from landfills.
4. Identify barriers to the development of California's organics recycling infrastructure.
5. Reporting

3. Tasks Identified

Task 1: Develop Work Plan

- A. Work with the Contract Manager to prepare a work plan detailing all tasks and deliverables (including reports; surveys; presentations and/or dissemination of information to stakeholders; materials to be posted or revised on the existing web and newsletter or list serve functions, or communicated by other means).
- B. The work plan shall include a timeline for all tasks and deliverables. CalRecycle will not pay Contractor's Administration time for compilation of billing/invoicing or delivery of invoices.
- C. The work plan shall include the data collection methodology, including methods to ensure data quality.
- D. The Contractor shall propose a method for aggregating data at a regional level considering the regional aggregations from the following sources:
 - *Cost Study on Commercial Recycling*, CalRecycle Publication Number DRRR-2011-0009, June 2010
 - *Third Assessment of California's Compost- and Mulch-Producing Infrastructure — Management Practices and Market Conditions*, CalRecycle Publication Number DRRR-2010-007, August 2010
 - *2014 Disposal-Facility-Based Characterization of Solid Waste in California*, CalRecycle Publication Number DRRR-2015-1546, October 6, 2015
 - *Facility Information Toolbox (FacIT)*,
<http://www.calrecycle.ca.gov/FacIT/images/Regions.gif>

Regional aggregation of data will be reevaluated if necessary to protect confidentiality (e.g., if there is only one anaerobic digestion facility in a proposed region)

- E. The work plan shall identify any entities with which the Contractor will coordinate to accomplish the identified tasks, such as waste haulers, facilities, trade organizations, local jurisdiction recycling coordinators, etc.
- F. The work plan shall identify the contents of the final contract report.
- G. No other contract work shall be conducted until the work plan is approved by the Contract Manager.
- H. Should changes to the work plan be necessary, the Contractor shall submit any such changes to the Contract Manager for approval before conducting other work.

Task 2: Collect, compile, analyze, and report data and information regarding the status of the organics processing and recycling infrastructure in California.

- A. The Contractor shall compile and analyze data and report on a regional basis (due to confidentiality

issues) on the organics pre-processing infrastructure, including pre-processing at material recovery facilities, organics recycling facilities, and at the source of generation of the waste (e.g., restaurants, grocery stores, etc.).

B. The Contractor shall compile and analyze data, and report on a regional basis data on organics recycling facilities, including but not limited to:

- permitted capacity (tons)
 - include all capacity from all permitting agencies (e.g., CalRecycle, regional air and water boards, local land use, etc.)
- annual throughput by feedstock material type (tons)
- dry/wet percentage of feedstock
- type of technology (e.g., open windrow, aerated static pile, stand-alone digestion, co-digestion, etc.)
- tipping fees
- available excess capacity
- sources of feedstock (e.g., commercial, residential, MRFs, etc.)

This data and information shall be collected for the following types of facilities:

- Composting
- Chipping and Grinding/Mulching
- Anaerobic Digestion
 - Stand-alone facilities
 - Waste Water Treatment Facilities that co-digest food waste

The Contractor shall work with the Contract Manager and stakeholders to develop the full list of types of facilities and the data and information which shall be collected for each type of facility.

Task 3: Conduct research on the status of end-use markets for products generated by organics recycling and diversion from landfills.

The Contractor shall compile and analyze data and then assess on a regional basis the status of markets (e.g., volumes, percent of sales, regional destinations) for products generated by recycling and diverting organic waste, including but not limited to:

- Biomethane
 - Electricity generation
 - Renewable natural gas
 - Renewable CNG fuel
- Compost and mulch
- Digestate
- Fuel to biomass facilities
- Alternative Daily Cover and Direct Land Application
- Edible food

Task 4: Identify barriers to the development of California's organics recycling infrastructure.

The Contractor shall identify industry's perspective on specific examples of barriers to developing organics recycling infrastructure as well as potential solutions, including but not limited to:

- Availability of adequate and clean feedstock
- Competition from other management practices that may be less expensive (e.g., landfill tip fees,

- direct land application, etc.)
- Siting (e.g., CEQA, public acceptance, etc.)
- Permitting and Regulations (e.g., air emissions, water quality, public health, direct land application, etc.)
- Markets and demand for products (e.g., product quality, grid and pipeline interconnection, etc.)
- Financing (e.g., state and local incentives and funding)

Task 5: Reporting

- A. The Contractor shall communicate with the Contract Manager on an ongoing basis and provide written reports, on a monthly basis at a minimum, to the Contract Manager covering activities that are in progress, completed, and upcoming; any issues that have arisen; a budget status; a status of meeting the timelines established in the work plan, etc.
- B. If significant issues arise, such as schedule delays, ineffective data collection methodologies, or changes to the workplan, the Contractor shall not wait for a scheduled report and shall report them to the Contract Manager immediately.
- C. All documents and/or reports drafted for publication by or for CalRecycle in accordance with this contract shall adhere to CalRecycle's Contractor Publications Guide at www.calrecycle.ca.gov/Contracts/PubGuide and shall be reviewed by a technical editor of the Contractor's choosing to ensure that the reports comply with CalRecycle's publication guidelines, after which they shall be submitted to and reviewed by the Contract Manager in consultation with the CalRecycle editor. *The Contractor is encouraged to consult with CalRecycle's project management team and editorial staff early in the development process to ensure deliverable requirements are clearly understood and to minimize the need for revisions.*
- D. The Contractor shall submit to CalRecycle by January 1, 2019, a final report on the contract and the work performed, including an evaluation of its effectiveness (with qualitative and quantitative results). The final report will include, at a minimum, the following:
 - An Executive Summary
 - A detailed description of the study design, including methodologies used to collect the data and information
 - Results of surveys and other methods used to collect and aggregate the data and information
 - Conclusions and Recommendations

The Contractor shall submit a draft final report to the Contract Manager by November 1, 2018. The draft will be reviewed by CalRecycle staff who will provide comments or questions that the Contractor will address or incorporate into the subsequent draft of the report. Any requested changes must be completed by the Contractor and resubmitted to the Contract Manager for final approval. Only when all revisions are made and approved by the Contract Manager will the report be deemed final.

- E. The Contractor will not receive final payment until the final report has been approved by the CalRecycle Contract Manager.

4. Contract/Task Time Frame

The Contract is expected to begin in July 2017 and end prior to April 2019. The timeframe below reflects the task/time frame of the contract from date of award:

Task	Deliverables	Start Date	End Date
Task 1: Develop Work Plan	Work Plan	July 2017	August 2017
Task 2: Collect, compile, analyze, and report data and information regarding the status of the organics processing and recycling infrastructure in California.		September 2017	June 2018
Task 3: Conduct research on the status of end-use markets for products generated by organics recycling and diversion from landfills.		September 2017	June 2018
Task 4: Identify barriers to the development of California's organics recycling infrastructure.		July 2018	October 2018
Task 5: Reporting	Monthly Status Reports	October 2017	January 2019
	Draft Final Report	November 2018	November 2018
	Final Report	January 2019	January 2019

5. Provisions of the Contract

The following provisions will be included in the Terms and Conditions or Special Terms and Conditions of the Contract. The Contractor shall, at a minimum, ensure that the following issues are addressed, as applicable to the services provided:

A. COPYRIGHTS AND TRADEMARKS:

The Contractor shall assign to CalRecycle any and all rights, title and interests to any copyrightable material or trademarkable material created or developed in whole or in any part as a result of this Agreement, including the right to register for copyright or trademark of such materials. The Contractor shall require that its subcontractors agree that all such materials shall be the property of CalRecycle. Such title will include exclusive copyrights and trademarks in the name of CalRecycle.

For contracts of \$5,000 or more, any document or written report prepared for or under the direction of CalRecycle, shall include a notation on the inside cover as follows:

"Prepared as part of CalRecycle contract number (**Insert**), Total Contract Amount (**Insert**), pursuant to Government Code Section 7550."

B. DELIVERABLES:

All documents and/or reports drafted for publication by or for CalRecycle in accordance with this contract shall adhere to CalRecycle's Contractor Publications Guide at www.calrecycle.ca.gov/Contracts/PubGuide/ and shall be reviewed by CalRecycle's Contract Manager in consultation with CalRecycle editor.

C. RECYCLED-CONTENT PRODUCT PURCHASING:

In the performance of this Agreement, the Contractor shall purchase used and/or recycled-content products as set forth on the back of the Recycled-Content Certification Form (Exhibit D, Attachment 1). For assistance in locating recycled-content products, please search the recycled-content product database available at: www.calrecycle.ca.gov/rcpm/. If after searching the database, contractors are unable to find the recycled-content products they are looking for, please notify CalRecycle's Contract Manager. All recycled content products purchased or charged/billed to CalRecycle that are printed upon such as promotional items, publications, written materials, and other educational brochures shall have both the total recycled content (TRC) and the post-consumer (PC) content clearly printed on them.

In addition, any written documents such as, publications, letters, brochures, and/or reports shall be printed double-sided on 100% post-consumer (PC) paper. Specific pages containing full-color photographs or other ink-intensive graphics may be printed on photographic paper. The paper should identify the post-consumer recycled content of the paper (i.e., "printed on 100% post-consumer paper"). When applicable, the Contractor shall provide the Contract Manager with an electronic copy of the document and/or report for CalRecycle's uses. When appropriate, only an electronic copy of the document and/or report shall be submitted and no hard copy shall be provided.